

species figured in "American Insects" is too cleanly and clearly marked an insect, and is possibly *Gelastocoris variegatus* or one of the several undescribed Western and Southern forms I am acquainted with. These are the principal points worthy of comment in the section devoted to the Waterbugs, wherein my familiarity with the subject enables me to appreciate more keenly any slip.

The landbugs, with which my acquaintance is not very profound, are naturally much better treated, as those referred to are of economic importance and therefore much more studied. Here, however, I would call attention to a printer's error on page 214, where *Jalysus spinosus* is written "*Zalysus*" *spinosus*. The distinction between *Aradids* and the bedbug is thus brought out on page 208, "But all adult flatbugs have wings, while all the bedbugs are wingless." Unfortunately for the accuracy of this statement, *Aradus cinnamomeus*, which in colour and size very much resembles the uninvited midnight guest, is, at least in this vicinity, normally wingless in the adult.

It is to be regretted that a recent work in a field where great steps forward are being taken constantly, should have its generally high standard lowered by inaccuracies which might easily have been avoided. Why are not particular Orders or portions of Orders submitted to authorities in the groups of which they treat before the MS. goes to the printer? There is much room for disagreement in matters of opinion, but none in matters of proven fact. The book is typographically excellent, and the figures, at least in the Heteroptera, very finely drawn, engraved and printed. In this respect it is superior to its predecessors, and save for these corrections and notes, the text is very suitable for general students and very entertainingly written.

#### A GALL ON BEARBERRY (ARCTOSTAPHYLOS).

BY T. D. A. COCKERELL, BOULDER, COLO.

In the case of any circumpolar plant, it is of much interest to learn whether the insects and fungi attacking it are the same in Europe, Asia and America. The Bearberry (*Arctostaphylos uva-ursi*) is already known to have a coccid (*Targionia Dearnessi*, Ckll.) infesting it, which is only known to occur in America. This *T. Dearnessi*, however, is not confined to the *Arctostaphylos*, for Professor L. Bruner sent me specimens which he collected Oct. 24, 1900, at Weeping Water, Nebraska, on *Ceanothus Americanus*.

At Ward, Colorado, July 19, 1905, at an altitude of about 9,000 feet, I found the *Arctostaphylos uva-ursi* badly infested by an aphid which produced bright red galls about 10 mm. long and 4 broad upon

November, 1905.

the leaves. These resulted from the folding over of the edge of the leaf, or sometimes both edges, forming a pocket in which were many aphides; wingless forms, pupæ with wing-pads, and young. No such gall has ever been found in Europe or Asia, and it is highly probable that we have an endemic American form confined to the bearberry.

The wingless forms (♀) are broad pyriform, subtruncate behind, about  $1,350 \mu$  long and about 900 broad; appearing black, but really dark olivaceous, obscurely marked on the back with black; body, antennæ and legs very sparsely hairy; beak not reaching middle coxæ; cauda broadly rounded; antennæ 4-jointed, 3 and 4 annulate; 3 much the longest.

The pupæ are about  $1,200 \mu$  long, deep olive-green; beak not reaching middle coxæ; antennæ six-jointed, 3 much longest, then 6 (the last two-fifths of which is narrowed); 4 and 5 cylindrical, about equal, together hardly as long as 3; 2 about as broad as long, its sides bulging. Larvæ greenish-yellow.

This insect may be called *Pemphigus Coweni*, in remembrance of Mr. J. H. Cowen's work on Colorado Aphididæ.

Cowen (Hemiptera of Colorado, p. 125) reports an aphid, which he describes but does not name, in galls on bearberry. I supposed that it must be the same as mine, but his description mentions honey-tubes, which are absent in my insect. His statement that the antennæ of the pupa are 7-jointed may possibly be due to the custom of counting the last joint as two.

#### CALIGRAPHA (CHRYSOMELA) PNIRSA.

It may be of interest to Coleopterists to know that the beautiful Chrysomelid, *Caligrapha pnirsa*, has been taken in considerable numbers at Rochester, Minnesota. One specimen was captured on May 30th, 1902, and another one seen, but not until the present year were more found. At the suggestion of Mr. Frederick Knab, of Urbana, Ill., who determined the species for me, I made careful search about basswood trees, and on May 30th, 1905, under the leaf-mould beneath these trees I unearthed a number of fine examples. A few weeks later others were taken as they were ascending basswood trunks about dusk, emerging from the ground apparently only under cover of darkness. I have been unable to find larvæ, nor has there been a trace of the species here since June.

If I have been correctly informed, this is the first authentic discovery of the species within the limits of the United States, although it is reported from several localities well north in Canada. It seems singular that a colony of a tree-inhabiting species so large and so well marked as *C. pnirsa* should be discovered here in the midst of a prairie country, unless, as may appear later, it exists in neighbouring States but has been overlooked.—CHAS. N. AINSLIE, Rochester, Minnesota